REMARKS

In view of the above amendments and the following remarks, reconsideration and further examination are requested.

By this amendment, claims 13-17 have been cancelled without prejudice and new claims 18-23 added. Thus, claims 18-23 are pending.

Support for the new claims can be found at least at: column 12, lines 25-30; column 21, lines 26-30; column 23, lines 35-49; Fig. 24; and from column 28, line 66 to column 29, line 9. These citations respectively point out that any multi-value digital modulation method, positioning points in a constellation can be implemented in the system, that the data for demodulation is carried in the first data stream and includes the value m (number of signal points), and that the second data stream can be demodulated according to the data for demodulation in the first data stream.

In light of the Examiner's requirement for new copies of the drawings, a clean copy of each drawing sheet of the printed patent is filed herewith. See 37 C.F.R. § 1.173(a)(2) and MPEP § 1413. It is submitted that the currently submitted clean copy of each drawing sheet meet the drawing requirements for reissue applications.

Art Rejection, Bryan Reference

Claims 13-17 were rejected under 35 U.S.C. § 102(e) as being anticipated by Bryan et al, U.S. Patent No. 5,561,468 (hereafter "Bryan"). This rejection is traversed.

Bryan is not prior art to the present application because the effective filing date of Bryan is May 7, 1993, which is after the effective filing date of the present application, March 25, 1992. The effective filing date of the present application is the filing date of the parent application 07/857,627. The present application is a reissue application of Patent No. 5,600,672, which matured from application 08/240,521, which is a continuation-in-part of application 07/857,627 (hereafter "the '627 application). The '627 application fully supports the claimed inventions. The support can be fully seen by referring to U.S. Patent No. 5,555,275, which matured from application 08/417,269, which is a continuation of the '627 application. Please see the following citations in U.S. Patent No. 5,555,275, which disclose the same substance as the citations listed above as support for the pending

claims: column 48, lines 36-42; column 16, line 65 to column 17, line 1; column 17, lines 30-44; Fig. 24; and from column 22, line 62 to column 23, line 3. Because the pending claims are fully supported by the parent application having a filing date of March 25, 1992, which is before the effective filing date, May 7, 1993, of Bryan, it is submitted that Bryan is not prior art to the present application. Accordingly, the rejection under 35 U.S.C. § 102(e) based on Bryan should be withdrawn.

Non-statutory Double Patenting Based on In re Scheller

Claims 13-17 were provisionally rejected under the judicially created doctrine of double patenting over claims in co-pending applications 09/680,176 and 09/680,177.

According to MPEP § 804(II)(B)(2), page 800-27, with respect to non-statutory double patenting rejections based on In re Schneller, 397 F.2d 350, 158 USPQ 210 (CCPA 1968), "the approval of the TC Director must be obtained before such a non-statutory double patenting rejection can be made." (Emphasis added). Further, it is worth noting the Board of Appeals & Interferences decision in Ex parte Davis, which, while not a precedential opinion, reflects a PTO Board of Appeals and Interferences opinion that "the principal opinion therein [i.e., in Schneller] is of doubtful controlling precedent." Ex parte Davis, 56 USPQ2d 1434, 1436 (Bd. Pat. App. & Inter. 2000). This decision by the Board serves to reinforce the necessity of obtaining the approval of the TC Director before such a double patenting rejection is imposed.

It is submitted that the requisite approval of the TC Director has not been obtained. In a telephone conversation with the Examiner, the Examiner directed the undersigned attorney "to assume that the Director's approval has not been obtained" when responding to the outstanding Office Action, and that the Examiner intends to remove the rejection and maintain the obviousness-type double patenting rejections.

Accordingly, it is requested that the provisional non-statutory double patenting rejection based on In re Schneller be withdrawn.

Non-statutory Obviousness-Type Double Patenting

Claims 13-17 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13-17 of co-pending applications 09/678,014 (hereafter "the '014 application) and 09/677,420 (hereafter "the '420 application).

With respect to the rejection based on the '014 application, a Terminal Disclaimer is filed herewith.

With respect to the rejection based on the '420 application, the rejection is traversed for the following reasons.

Initially, it is noted that the claims in the '420 application have been amended. Thus, it is requested that the Examiner reconsider the obviousness-type double patenting rejection in light of the amended claims and the following comments.

Each of the pending claims, i.e., claims 18-23, of the present application recites that the first data stream has data for demodulation including the number of signal points of the constellation for the second data stream. In contrast to these recitations, the claims in the '420 application recite that the first data stream has synchronization data and data for demodulation for demodulating the second data stream. It would not have been obvious to a person having ordinary skill in the art at the time the present invention was made to provide a first data stream having data for demodulation including the number of signal points of the constellation for the second data stream based on the claims in the '420 application of a first data stream including synchronization data and data for demodulation for demodulating the second data stream. The claims of the '420 application do not include any recitation, nor does the subject matter supporting the claims of the '420 application suggest, the number of signal points being included in the data for demodulation.

In view of the above, it is submitted that the provisional obviousness-type double patenting rejection based on the claims of the '420 application is inapplicable to claims 18-23 of the present application.

Because of the above amendments and remarks, it is submitted that claims 18-23 are allowable, and that the present application is in condition for allowance. The Examiner is invited to contact the undersigned attorney by telephone to resolve any remaining issues.

Respectfully submitted,

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